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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,827	02/04/2002	Scott M. Lewit	5785-30	4819

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EXAMINER
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VO, HAI

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/066,827	<b>Applicant(s)</b> LEWIT ET AL.	
	<b>Examiner</b> Hai Vo	<b>Art Unit</b> 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.  
2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 19-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 22-27 is/are allowed.  
6) ☒ Claim(s) 1-6, 9, 10 and 19-21 is/are rejected.  
7) ☒ Claim(s) 7 and 8 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9, 10, and 19-21 are rejected under 35 U.S.C. 103(a) as being obvious over Lewit (US 6,497,190) in view of Becker et al (US 5,262,230).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or

subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Figure 1 of Lewit shows a composite part having an integrated flow channel, comprising an elongated foam core 16, 18; one fabric layer 13 secured to the elongated core 16, 18; and extending along a first elongated side of the foam core 16, 18; the fabric layer 13 enclosing an elongated channel 14 between the first elongated side of the foam core and the fabric layer. Figure 4 further shows the fabric layer 13 encloses at least a second and third elongated side of the foam core, each of said second and third elongated sides adjoining the first elongated side. Figure 4 also shows the composite part comprising fabric tab portions extending from the second and third elongated side. Lewit discloses the foam core filling the interstices 11 of the flow channel 14 without penetrating into the outer fabric layer 13 (figures 2-3, column 3, lines 15-20). Likewise, it is readily apparent that the outer fabric layer 13 would have a porosity sufficient to prevent a passage of the foam from the foam core through the fabric layer 13 and into the flow channel 14. This reads on Applicant's fabric layer having the porosity sufficient to permit a predetermined amount of resin to escape from the flow channel 14 along the elongated length. Lewit does not specifically disclose that the flow channel media 14 made of a three-dimensional plastic mesh. Lewit discloses flow channel media 14 made of three-dimensional plastic matrix of fibers (column 4, lines 1-10. Becker, however, teaches a lightweight composite material for use in the boat construction containing reinforcing fibers in a thermoset matrix in three-dimensional mesh

structure (abstract, column 5, lines 1-3, and 42) to provide a composite material with high corrosion resistance, high impact strength, and high tensile strength. Becker discloses the three-dimensional plastic mesh having a porosity of at least 50%, meeting the specific range required by the claims (column 1, lines 15-17). Becker discloses the three-dimensional plastic mesh defines interstices for passage of resin (column 1, lines 10-20). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the three-dimensional plastic mesh for the three-dimensional matrix fibers as taught in Becker motivated by the desire to provide the composite part having corrosion resistance, high impact strength, and high tensile strength. This is important to the expectation of successfully practicing the invention of Lewit and thus suggesting the modification.

Lewit does not specifically disclose the three-dimensional plastic mesh having substantially less resistance to a flow of resin as compared to the fabric layer and how the resin flows when introduced within the flow channel under pressure. It appears that the composite part of Lewit as modified by Becker meet all the structural limitations and chemistry as required by the claims. The composite part comprises an elongated foam core; one fabric layer secured to the elongated core; and extending along a first elongated side of the foam core, the fabric layer enclosing an elongated channel between the first elongated side of the foam core and the fabric layer. The fabric layer encloses at least a second and third elongated side of the foam core, each of said second and third elongated sides adjoining the

first elongated side. The composite part comprises fabric tab portions extending from the second and third elongated side. The flow channel is made of the three-dimensional plastic mesh. Accordingly, it is the examiner's position that the three-dimensional plastic mesh would inherently substantially have less resistance to a flow of resin as compared to the fabric layer and that the resin would inherently flow along a length of the elongated side when introduced within the flow channel under pressure. It seems from the claim, if one meets the structure recited, the properties must be met or Applicant's claim is incomplete. This is also in line with *In re Spada*, 15 USPQ 2d 1655 (1990), which holds that Products of identical chemical composition can not have mutually exclusive properties.

***Allowable Subject Matter***

1. Claims 22-27 are allowed.
2. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reasons have been stated in the previous Office Action mailed on 03/20/2003.

***Response to Arguments***

3. The art rejections over Lewit as evidenced by Uemura have been overcome by the present amendment.
4. Applicant's arguments with respect to claims 1-6, 9, 10, and 19-21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Hai Vo*

HV